

REMARKS

Applicant is in receipt of the Office Action mailed February 3, 2004. Claims 1 – 32 were pending. Applicant has amended claims 1 – 3, 5 – 12, 14, 15, 17 – 19, and 26 – 32. Applicant has cancelled claims 20 – 25 and added new claims 33 – 42. Claims 1 – 19 and 26 – 42 remain pending in the application.

The disclosure was objected to because of informalities on pages 9 and 15. Applicant has made appropriate corrections to the sections in question.

The drawings were objected to as failing to comply with 37 CFR 1.84(p)(5) for including reference signs not mentioned in the description, specifically reference sign 1240 in Fig. 12A. Applicant has remedied this objection by amending the specification to include reference sign 1240 in the description. Applicant further notes that the inclusion of reference sign 1240 mirrors similar statements about using the keyboard in Braille configuration mode made elsewhere in the description, such as lines 16 – 20 of page 24. As such, no new matter has been added.

Claims 19 and 26 – 32 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended claims 19 and 26 – 32. Accordingly, the above rejection is believed moot.

Claims 1 – 4, 8 – 10, 15, 16, 18, 20 – 22, 25, 26, and 28 – 30 were rejected under 35 U.S.C. §102(b) as being unpatentable over Litt et al. (USPN 4,752,772, hereinafter “Litt”). Applicant respectfully traverses this rejection.

The Examiner states that Litt discloses a method for displaying information on the keys of a keyboard. However, Litt discloses a *single* modified key operable to incorporate a mechanical Braille display. (col. 2, lines 53 – 57) Applicant can find no language in Litt that teaches or suggests “**displaying the information on a surface of each of the plurality of keys,**” as recited in Applicant’s amended claim 1.

Applicant notes that Litt teaches away from the use of a plurality of keys to display Braille information at Col. 2, lines 26 – 48. Specifically, Litt teaches that “Because the Braille reading process involves ‘looking’ at segments of the line and may involve more than a single reading finger, it has been believed that an effective interface with a computer must therefore use a multicell display which simultaneously displays phrases or segments of the text being read. *If a multicell display must be used, then the separate reading location is unavoidable and the consequent limitations on user efficiency naturally follow.*” (emphasis added) Litt further teaches that “We have discovered that efficient and effective Braille reading does not require a multicell display. Comparable reading speeds and comprehension can be achieved with a single cell display which the user can electronically scan over the target text. *As part of our discovery, we have eliminated the inherent inefficiencies associated with a separate Braille reading terminal by integrating the reading function into a key of the standard keyboard.*” (emphasis added)

Therefore, claim 1, along with its dependent claims 2 – 9, is believed to patentably distinguish over Litt for the above reason. Claim 33 recites features similar to those of claim 1. Accordingly claim 33, along with its dependent claims 34 – 41, is believed to patentably distinguish over Litt for at least the same reason.

In addition, Applicant can find no language in Litt which teaches or suggests a system operable to “**display a first set of symbols on the plurality of keys in a first mode and a second set of symbols on the plurality of keys in a second mode,**” as recited in Applicant’s claim 10.

Accordingly, claim 10, along with its dependent claims 11 – 19, is believed to patentably distinguish over Litt for the above reason. Claims 26 and 42 recite features similar to those of claim 10. Claims 26 and 42, along with their dependent claims, are therefore believed to patentably distinguish over Litt for at least the same reason.

Furthermore, Applicant can find no language in Litt that teaches or suggests a method “wherein receiving the request to change the configuration of the plurality of keys comprises detecting **a user selection of an option from the configuration panel,**” as recited in Applicant’s claim 8. In contrast, Litt teaches the use of a reading cursor controlled by standard cursor controls, operable to identify a position within text. Interface circuitry then generates a control signal which yields the Braille representation of the information appearing in that position (i.e. the selected text). (col. 3, lines 3 – 16) Applicant therefore respectfully disagrees with the Examiner’s assertion that “such arrow keys or other ‘standard cursor controls’ on a keyboard would be a configuration panel.”

Accordingly, claim 8 is believed to patentably distinguish over Litt, along with claims 16 and 40 which describe similar limitations.

Furthermore, Applicant can find no teaching or suggestion in Litt of “a control unit configured to cause **a display of a first set of symbols of a first language on the plurality of keys** in a first mode and **a display of a second set of symbols of a second, different language on the plurality of keys** in a second mode,” as recited in Applicant’s new claim 42. In contrast, Litt teaches the use of a reading cursor controlled by standard cursor controls, operable to identify a position within text. Interface circuitry then generates a control signal which yields the Braille representation of the information appearing in that position (i.e. the selected text). (col. 3, lines 3 – 16) Accordingly, claim 42 is believed to patentably distinguish over Litt for at least the above reason.

Claims 1, 5, 10, and 11 were further rejected under 35 U.S.C. §102(b) as being unpatentable over Cairns (USPN 4,962,530, hereinafter “Cairns”). Applicant respectfully traverses this rejection.

Applicant can find no language in Cairns that teaches or suggests “**displaying the information on a surface of each of the plurality of keys, wherein the surface of each key is operable to be depressed,**” as recited in Applicant’s amended claim 1. In contrast,

Cairns teaches a matrix of keys set above an associated matrix of displays. (col. 4, lines 38 – 42 and Fig. 4)

Accordingly, claim 1, along with its dependent claims 2 – 9, is believed to patentably distinguish over Cairns for the above reason. Claim 33 recites features similar to those of claim 1, and is thus believed, along with its dependent claims 34 – 41, to patentably distinguish over Cairns for at least the same reason.

In addition, Applicant can find no language in Cairns which teaches or suggests a system operable to “**display a first set of symbols on the plurality of keys in a first mode and a second set of symbols on the plurality of keys in a second mode,**” as recited in Applicant’s claim 10.

Accordingly, claim 10, along with its dependent claims 11 – 19, is believed to patentably distinguish over Cairns for the above reason. Claims 26 and 42 recite features similar to those of claim 10, and are therefore believed, along with their dependent claims, to patentably distinguish over Cairns for at least the same reason.

Furthermore, Applicant can find no teaching or suggestion in Cairns of “a control unit configured to cause **a display of a first set of symbols of a first language on the plurality of keys in a first mode and a display of a second set of symbols of a second, different language on the plurality of keys in a second mode,**” as recited in Applicant’s new claim 42. In contrast, Cairns teaches a system which randomly changes the position of all visible indicia on a matrix of keys upon each keystroke. (Abstract) Accordingly, claim 42 is believed to patentably distinguish over Cairns for at least the above reason.

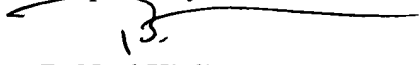
In light of the above remarks, Applicant believes further traversal of the Examiner’s rejections to be unnecessary at this time.

CONCLUSION

In light of the foregoing remarks, Applicant respectfully submits the application is now in condition for allowance, and an early notice to that effect is requested.

No fees are believed necessary; however , the Commissioner is authorized to charge any fees which may be required, or credit any overpayment, to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 50-1505\5681-49800\BNK.

Respectfully submitted,


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